FINAL REPORT

Marine Endangered Species Monitoring Program
Purchase Order No. WMI 164907

Calcasieu Pass Project
Cameron, Louisiana

Dates:

07 October through 10 November 2000

Submitted by:

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28 November 2000

ABSTRACT

A twenty-four-hour-a-day marine endangered species monitoring program was conducted onboard the hopper dredge "B.E. Lindholm" during the Calcasieu Pass dredging project in Cameron, Louisiana from 07 October through 10 November 2000. Endangered and threatened sea turtles were the species targeted. One Kemp's ridley (Lepidochelys kempii) was recovered dead in the vicinity of the dredge on 4 November 2000.

INTRODUCTION

The observer program to monitor the impact of dredging on endangered species in the area of dredge operations was conducted in response to US Army Corps of Engineers (COE) contract to perform maintenance dredging of the Calcasieu River Ship Channel in Cameron, Louisiana. Pursuant to agreements with the National Marine Fisheries Service (NMFS), certified observers were required onboard throughout the project to document any detected incidents involving target species.

SCOPE OF WORK

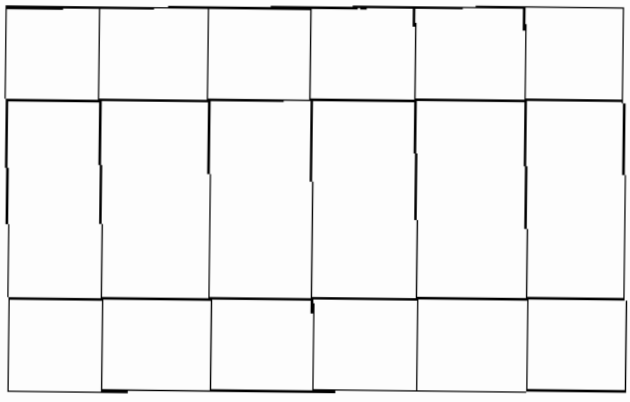
REMSA, Inc. was subcontracted by Weeks Marine, Inc. of Cranford, NJ to conduct the observer program for the project. ***REMSA*** was to provide the necessary trained personnel and equipment to clean and monitor inflow and overflow screens onboard the hopper dredge "B.E. Lindholm," and provide the necessary reports. Monitoring was to be performed 24 hours each day from 07 October through 10 October 2000. Observers were to inspect and clean all and overflow screens, and to inspect both dragheads each time they were brought on deck for cleaning and maintenance. Any death or injury involving target species required the evidence to be identified, logged, measured, and photographed. Disposal of any animals recovered was to be the responsibility of the observer and dredge personnel. Target species included the loggerhead turtle (Caretta caretta), green turtle (Chelonia mydas), Kemp's ridley turtle (Lepidochelys kempii), leatherback turtle (Dermochelys coriacia), and hawksbill turtles (Eretmochelys imbricata). A load sheet was to be completed for each load whether or not turtle parts were found. In the case of an incident involving a sea turtle, an incident report form was to be completed. These forms were to be provided by the dredging contractor. Examples of the blank forms are in the Appendix. Load sheets were turned in to the Corps

Inspector weekly, and a final report was to be submitted upon completion of the project. A daylight bridge watch was to be conducted during periods when the observer was not occupied with screen cleaning duties. Observers were to be certain that dredge crew personnel were aware of the need to avoid incidents involving any endangered animal, and that civil and criminal penalties are possible for harming or harassing endangered species.

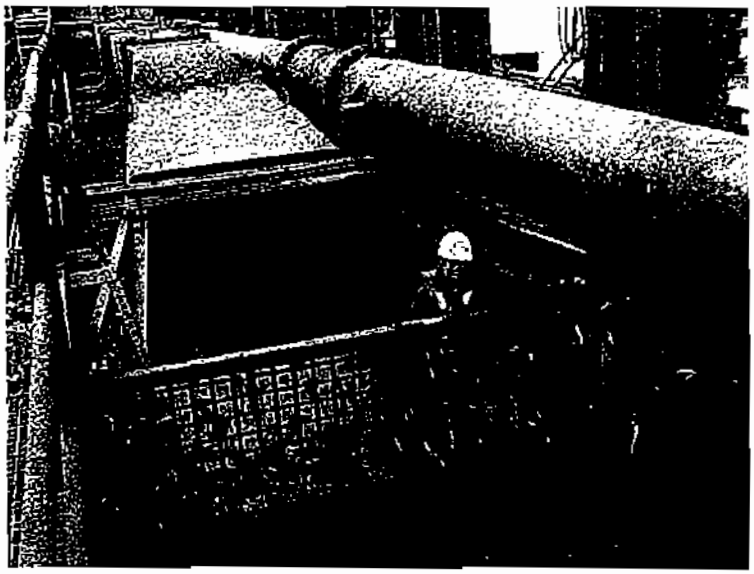
METHODS

Maintenance dredging by the hopper dredge B.E. Lindholm in Cameron, Louisiana began when the observers arrived onboard on 07 October 2000 and continued through 10 November 2000 (Loads: 001-063). The coordinates for the area were as follows: latitude 29.725482 longitude: 29.709539 through latitude 29.709539 longitude 93.337210. Two trained observers were present onboard the dredge during all dredging operations working 12 hours each day covering 24 hours each day. Names and addresses of observers are furnished in the Appendix.

The B.E. Lindholm operated with 100% screening of all inflow. The dragheads were equipped with turtle deflectors and restricting bars inside the suction area with openings that measured 4" x 4" and 4" x 12" (see diagram below)



The inflow passed through three central landers over the hopper with screening grates measuring 4" x 4". See picture below.



Excessive material was discharged overboard after passing through the screens and into the hopper. The overboard discharge was also screened with baskets having openings measuring 4" x 4" but these baskets were removed on 8 October 2000 due to excessive clogging caused by debris. All inflow screens were inspected and cleaned after each loading cycle was complete.

Water temperatures were taken daily throughout the job. Mid-depth temperatures ranged from a low of 66° F to a high of 78°F. Results are found in the daily load sheets.

A bridge lookout was maintained during those daylight hours that the observer was not on deck checking screens and was on duty. Watch was kept for turtles in the dredging area and dump site.

Turtle observation sheets, or load sheets, were filled out for each load that was completed. Observers routinely noted the numbers and types of other species being deposited on the screens. No turtles or turtle parts were found in the dragheads or screens during the project. Because this project was considered "agitation," only two loads were daily and no summary was required. The load sheets were turned into the Corp's Inspector weekly. Copies of all load sheets are appended.

RESULTS

One Kemp's ridley turtle (Lepidochelys kempii) was found floating just outside the ship channel on 4 November 2000. It was spotted from the bridge by the onboard observer. A crew boat was dispatched and the turtle was recovered.

DISCUSSION

The Kemp's ridley turtle found on 04 November 2000 was in an advanced state of postmortem change- bloated with gas, skin discoloration, and scutes falling from the carapace and plastron. The right front flipper and head appeared to be torn off. The skull was attached to the carapace by strands of connective tissue with very little to no skin present.

Because this turtle was found floating, it is difficult to determine whether or not the fatality was dredge related. The rear flippers were frayed at the tips and the manner in which the right flipper and head appeared to be removed could be indicative of injuries consistent with a turtle caught in the draghead. It is possible that this turtle was caught in the draghead and may have fallen out when the pumps were turned off and the dragheads were "rinsed" at the surface. If so, it is also possible that this turtle remained on the bottom of the ship channel until the gasses of decomposition built up enough to float this turtle to the surface.

Several pictures were taken of this turtle but, unfortunately, the film was overexposed and none could be developed.

If there are any questions concerning the methods, results, or further details of topics covered here are required, please contact:

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